Spanwise skin-friction distribution at three streamwise positions in a FPG boundary layer (Case 1). Deviation from the value at the reference measuring position in %.

\[ x = 4.16 \text{ m} \]

Measuring positions along generator at \( z = 0 \):

\[ x = 3.28 \text{ m} \]

\[ x = 2.16 \text{ m} \]
Layer 3: Case 3.
Profiles of the Reynolds normal-stress component \( \overline{\nu'^2} \) in a FPG turbulent boundary layer.
Case 3: STREAMWISE DEVELOPMENT OF THE MAXIMA OF THE REYNOLDS STRESS PROFILES

In a FPG turbulent boundary layer, lines are for visual aid only.
Layer (Case 1): Deviation from the value at the reference measuring position in a FPG boundary spanwise skin-friction distribution at three streamwise positions in m.

- $x = 4.16$ m
- $x = 3.28$ m
- $x = 2.16$ m
Layer Case 3: Profiles of the Reynolds normal-stress component $\overline{u'v'}$ in a FPG turbulent boundary layer.
Case 3: in a FPG turbulent boundary layer, lines are for visual aid only.
Streamwise development of the maxima of the Reynolds stress profiles.

\[
\frac{\sqrt{\frac{u_1}{\sqrt{W_z}}}}{\sqrt{\frac{u_2}{\sqrt{W_z}}}}
\]

Log-law valid -> Log-law valid
Component $q_n$ in a $FG$ turbulent boundary layer with Reynolds normal stresses of $T_w$ and the maximum value of the dimensionless Reynolds stress, the skewness and the development of the skin-friction fluctuation, the skewness and the
Profilles of the Reynolds normal-stress component $\bar{u}_1^2$ in a FPG turbulent boundary layer with relaxationization. Case 4.
Boundary layer with Relaminarization, Case 2.

Distribution of the production term for the Reynolds shear stress in a FPG.
Fig. 32 P.2

Case 2 (with relaxation).

Boundary layer with $Re_x$ as a parameter. Case 1 (laminar section).

One-dimensional spectra in Kolmogorov scaling in a FFG fully turbulent.

$K_n^1$

$E_{uu}/(k_2 n)$

$Re_x = 130 - 150$

$Re_x = 13 - 18$

$Re_x = 23$

$Re_x = 400$

$Re_x = 600$
Streamwise development of the skin-friction fluctuation, the skewness and the flatteness of $\tau_w$ and the maximum value of the dimensionless Reynolds normal stress.
Boundary layer with relaxation. Case 2.

Distribution of the production term for the Reynolds shear stress in a FPG
Case 2 (with relaxation).

Boundary layer with \( \text{Re}_x \) as a parameter. Case 1 (laminar).

One-dimensional spectra in Kolmogorov scaling in a FPF fully turbulent.

\[ K^n \]

\[ E_{uv} / (v^2 n) \]